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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/621,572	07/18/2003	Akihisa Itabashi	240017US2DIV	2127
22850	7590 06/14/2005		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			PHAM, HAI CHI	
	ANDRIA, VA 22314		ART UNIT	PAPER NUMBER
			2861	
			DATE MAILED: 06/14/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
,	10/621,572	ITABASHI, AKIHISA				
Office Action Summary	Examiner	Art Unit				
	Hai C. Pham	2861				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by stated that the period for reply will, by stated the period for reply will be period for reply w	N. 1.136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days od will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDONE.	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 31 March 2005.						
2a) ☐ This action is FINAL . 2b) ☑ T	his action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 1-3 and 9-13 is/are allowed. 6) ☐ Claim(s) 4-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Exami	iner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the corr						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for forei a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the p application from the International Bure * See the attached detailed Office action for a l	ents have been received. ents have been received in Applicati riority documents have been receive eau (PCT Rule 17.2(a)).	ion No. <u>09/715,151</u> . ed in this National Stage				
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4) Interview Summary Paper No(s)/Mail Da					
Notice of Dransperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 02/18/05.		Patent Application (PTO-152)				

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DETAILED ACTION

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Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims **4-6** are rejected under the judicially created doctrine of double patenting over claims **2-4** of U. S. Patent No. **6,700,687** since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter. In fact, the above-mentioned U.S. Patent No. 6,700,687 recites in claims 2-4 all the limitations included in claims 4-6 of the current Application with a small difference in wording, namely:

- · a light source emitting a light beam,
- a mechanical deflector,
- a first optical system,

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a second optical system,

- a housing that contains the above components,
- a holding member for holding the mechanical deflector (as compared to a "deflector mounting plate" recited in the current Application),
- a material of the housing is different in heat conductivity from said holding member (as compared to "the bottom housing plate has a first heat conductivity" and "the deflector mounting plate has a second heat conductivity"),
- the heat conductivity of said housing is smaller than heat conductivity of said holding member (as compared to "the first heat conductivity is smaller than the second heat conductivity),
- said mechanical deflector is covered by a cover having an optical window,
- a cooling part forcibly cooling said mechanical deflector.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

3. Claims 7-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,700,687 in view of Tachibe et al. (U.S. 6,195,190).

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The above-mentioned '687 Patent discloses all the basic limitations of the claimed invention except for the cooling unit provided at an exterior surface of the housing, including a cooling fan.

Tachibe et al., an acknowledged prior art, discloses an optical beam scanning device having a light source (11) emitting a light beam directed to a mirror of a mechanical deflector (polygon mirror 15) through a first optical system (cylindrical lens 20), the light beam being deflected in a main scanning direction by the mirror surface of the deflector through a second optical system (scanning lenses 7) to a surface to be scanned (light sensitive body) moving in a sub-scanning direction, the light source, the first optical system, the mechanical deflector and the second optical system is contained in a housing (casing 2) (Fig. 1), the mechanical deflector being covered by a cover (8) having an optical window (10), and a cooling part (heat dissipating fins 18 formed on the exterior of the casing 2 and a cooling blower, not shown) forcibly cooling said mechanical deflector (col. 7, lines 44-52).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the cooling unit as taught by Tachibe et al. into the device claimed by the '687 Patent. The motivation for doing so would have been to further dissipate the heat created by the rotation of the polygon mirror to the outside of the optical scanning device such that none of the optical components are affected by the generation of the heat.

Allowable Subject Matter

4. Claims 1-3 and 9-13 are allowed.

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Response to Arguments

5. Applicant's arguments with respect to claims 4-8 have been considered but are most in view of the new grounds of rejection presented in this Office action.

Response to Arguments

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HarkliPhan

HAI PHAM
PRIMARY EXAMINER

June 10, 2005